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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=1; day=26; hr=13; min=32; sec=52; ms=661;]

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Reviewer Comments:

<210> 1

<211> 405

<212> DNA

<213> Murine anti-B7-2 heavy chain

<220>

<221> CDS

<222> (1)..(405)

<223>

Numeric Identifier <213> can only be one of three choices, "Scientific name, i.e. Genus/species, Unknown or Artificial Sequence." For all sequences using "Unknown or Artificial sequence", for numeric identifier <213>, a mandatory feature is required to explain the source of the genetic material. The feature consists of <220>, which remains blank, and <223>, which states the source of the genetic material. Suggest using "Artificial sequence" for numeric identifier <213> and "The above given response" for numeric identifier <223> in the mandatory feature. Please check for similar errors and make all necessary changes.

Application No: 09501102 Version No: 2.0

Input Set:**Output Set:**

Started: 2010-01-25 14:23:49.649
Finished: 2010-01-25 14:23:56.105
Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 456 ms
Total Warnings: 44
Total Errors: 31
No. of SeqIDs Defined: 52
Actual SeqID Count: 52

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (1)
E 201	Mandatory field data missing in <223> in SEQ ID (1)
W 402	Undefined organism found in <213> in SEQ ID (2)
W 402	Undefined organism found in <213> in SEQ ID (3)
E 201	Mandatory field data missing in <223> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
W 402	Undefined organism found in <213> in SEQ ID (5)
E 201	Mandatory field data missing in <223> in SEQ ID (5)
W 402	Undefined organism found in <213> in SEQ ID (6)
W 402	Undefined organism found in <213> in SEQ ID (7)
E 201	Mandatory field data missing in <223> in SEQ ID (7)
W 402	Undefined organism found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)

Input Set :

Output Set :

Started: 2010-01-25 14:23:49.649

Finished: 2010-01-25 14:23:56.105

Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 456 ms

Total Warnings: 44

Total Errors: 31

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[illegible]

Input Set:

Output Set:

Started: 2010-01-25 14:23:49.649
Finished: 2010-01-25 14:23:56.105
Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 456 ms
Total Warnings: 44
Total Errors: 31
No. of SeqIDs Defined: 52
Actual SeqID Count: 52

Error code	Error Description
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
E 336	Empty lines found between the proteins and the dna
W 402	Undefined organism found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27)
W 213	Artificial or Unknown found in <213> in SEQ ID (28)
W 213	Artificial or Unknown found in <213> in SEQ ID (29)
W 213	Artificial or Unknown found in <213> in SEQ ID (30)
W 213	Artificial or Unknown found in <213> in SEQ ID (31)
W 213	Artificial or Unknown found in <213> in SEQ ID (32) This error has occurred more than 20 times, will not be displayed
W 402	Undefined organism found in <213> in SEQ ID (41)
E 322	CDS location out of range SEQID (41) At Protien count (133)
E 320	Wrong Nucleic Acid Designator, ga in SEQID (41)
W 402	Undefined organism found in <213> in SEQ ID (42)
W 402	Undefined organism found in <213> in SEQ ID (43)
E 322	CDS location out of range SEQID (43) At Protien count (136)
E 320	Wrong Nucleic Acid Designator, cc in SEQID (43)
E 322	CDS location out of range SEQID (43) At Protien count (234)
E 320	Wrong Nucleic Acid Designator, ag in SEQID (43)
E 322	CDS location out of range SEQID (43) At Protien count (246)

Input Set:

Output Set:

Started: 2010-01-25 14:23:49.649
Finished: 2010-01-25 14:23:56.105
Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 456 ms
Total Warnings: 44
Total Errors: 31
No. of SeqIDs Defined: 52
Actual SeqID Count: 52

Error code	Error Description
E 320	Wrong Nucleic Acid Designator, ca in SEQID (43)
E 322	CDS location out of range SEQID (43) At Protien count (355)
E 320	Wrong Nucleic Acid Designator, gg in SEQID (43)
W 402	Undefined organism found in <213> in SEQ ID (44)

SEQUENCE LISTING

<110> Co, Man Sung
 Vasquez, Maximiliano
 Carreno, Beatriz
 Celniker, Abbie Cheryl
 Collins, Mary
 Goldman, Samuel
 Gray, Gary S.
 Knight, Andrea
 O'Hara, Denise
 Rup, Bonita
 Veldman, Geertruida M.

<120> HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 MOLECULES AND METHODS OF TREATMENT THEREWITH

<130> 08702.0081-00000

<140> 09501102

<141> 2000-02-09

<150> 09/249,011

<151> 1999-02-12

<160> 52

<170> PatentIn version 3.1

<210> 1

<211> 405

<212> DNA

<213> Murine anti-B7-2 heavy chain

<220>

<221> CDS

<222> (1)..(405)

<223>

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Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Arg
 20 25 30

cct ggg gaa tca gtg aag att tcc tgc aag ggt tcc ggc tac aca ttc 144

Pro Gly Glu Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
 35 40 45

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 50 55 60

gag tgg att gga gtt att aat att tac tat gat aat aca aac tac aac 240

Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn

65	70	75	80	
cag aag ttt aag ggc aag gcc aca atg act gta gac aaa tcc tcc agc				288
Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser				
	85	90	95	
aca gcc tat atg gaa ctt gcc aga ttg aca tct gag gat tct gcc atc				336
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile				
	100	105	110	
tat tac tgt gca aga gcg gcc tgg tat atg gac tac tgg ggt caa gga				384
Tyr Tyr Cys Ala Arg Ala Ala Trp Tyr Met Asp Tyr Trp Gly Gln Gly				
	115	120	125	
acc tca gtc acc gtc tcc tca				405
Thr Ser Val Thr Val Ser Ser				
	130	135		
<210> 2				
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<212> PRT				
<213> Murine anti-B7-2 heavy chain				
<400> 2				
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	20	25	30	
Pro Gly Glu Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe				
	35	40	45	
Thr Asp Tyr Ala Ile Gln Trp Val Lys Gln Ser His Ala Lys Ser Leu				
	50	55	60	
Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn				
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Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser				
	85	90	95	
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile				
	100	105	110	
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Thr Ser Val Thr Val Ser Ser
130 135

<210> 3
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<213> Murine anti-B7-2 light chain

<220>
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<222> (1)..(396)
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1 5 10 15

ggt acc tgt ggg gac att gtg ctg tca cag tct cca tcc tcc ctg gct 96
Gly Thr Cys Gly Asp Ile Val Leu Ser Gln Ser Pro Ser Ser Leu Ala
20 25 30

gtg tca gca gga gag aag gtc act atg agc tgc aaa tcc agt cag agt 144
Val Ser Ala Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser
35 40 45

ctg ctc aac agt aga acc cga gag aac tac ttg gct tgg tac cag cag 192
Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
50 55 60

aaa cca ggg cag tct cct aaa ctg ctg atc tac tgg gca tcc act agg 240
Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
65 70 75 80

gaa tct ggg gtc cct gat cgc ttc aca ggc agt gga tct ggg aca gat 288
Glu Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp
85 90 95

ttc act ctc acc atc agc agt gtg cag gct gaa gac ctg gca gtt tat 336
Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr
100 105 110

tac tgc acg caa tct tat aat ctt tac acg ttc gga ggg ggg acc aag 384
Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gly Gly Thr Lys
115 120 125

ctg gaa ata aaa 396
Leu Glu Ile Lys
130

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<212> PRT
<213> Murine anti-B7-2 light chain

<400> 4

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20 25 30

Val Ser Ala Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser
35 40 45

Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
50 55 60

Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
65 70 75 80

Glu Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp
85 90 95

Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr
100 105 110

Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gly Gly Thr Lys
115 120 125

Leu Glu Ile Lys
130

<210> 5

<211> 405

<212> DNA

<213> Humanized murine anti-human B7-2 heavy chain

<220>

<221> CDS

<222> (1)..(405)

<223>

<400> 5

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Met Gly Trp Asn Cys Ile Ile Phe Phe Leu Val Thr Thr Ala Thr Gly
1 5 10 15

gtg cac tcc cag gtc cag ctg gtg cag tct ggg gct gag gtg aag aag 96
Val His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
20 25 30

cct ggg agc tca gtg aag gtg tcc tgc aaa gct tcc ggc tac aca ttc	144
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe	
35 40 45	

act gat tat gct ata cag tgg gtg aga cag gct cct gga cag ggc ctc	192
Thr Asp Tyr Ala Ile Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu	
50 55 60	

gag tgg att gga gtt att aat att tac tat gat aat aca aac tac aac	240
Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn	
65 70 75 80	

cag aag ttt aag ggc aag gcc aca atg act gta gac aag tcg acg agc	288
Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Thr Ser	
85 90 95	

aca gcc tat atg gaa ctt agt tct ttg aga tct gag gat acg gcc gtt	336
Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val	
100 105 110	

tat tac tgt gca aga gcg gcc tgg tat atg gac tac tgg ggt caa ggt	384
Tyr Tyr Cys Ala Arg Ala Ala Trp Tyr Met Asp Tyr Trp Gly Gln Gly	
115 120 125	

acc ctt gtc acc gtc tcc tca	405
Thr Leu Val Thr Val Ser Ser	
130 135	

<210> 6
 <211> 135
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 <213> Humanized murine anti-human B7-2 heavy chain

<400> 6

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Val His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
20 25 30

Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

Thr Asp Tyr Ala Ile Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
50 55 60

Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn
65 70 75 80

Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Thr Ser
85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Ala Ala Trp Tyr Met Asp Tyr Trp Gly Gln Gly
115 120 125

Thr Leu Val Thr Val Ser Ser
130 135

<210> 7
<211> 396
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<220>
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Met Asp Ser Gln Ala Gln Val Leu Ile Leu Leu Leu Leu Trp Val Ser
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ggc acc tgt ggg gac att gtg ctg aca cag tct cca gat tcc ctg gct 96
Gly Thr Cys Gly Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala
20 25 30

gta agc tta gga gag agg gcc act att agc tgc aaa tcc agt cag agt 144
Val Ser Leu Gly Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln Ser
35 40 45

ctg ctc aac agt aga acc cga gag aac tac ttg gct tgg tac cag cag 192
Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
50 55 60

aaa cca ggg cag cct cct aaa ctg ctg atc tac tgg gca tcc act agg 240
Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
65 70 75 80

gaa tct ggg gtc cct gat cgc ttc agt ggc agt gga tct ggg aca gat 288
Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95

ttc act ctc acc atc agc agt ctg cag gct gaa gac gtg gca gtt tat 336
Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
100 105 110

tac tgc acg caa tct tat aat ctt tac acg ttc gga cag ggg acc aag 384
Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gln Gly Thr Lys

115

120

125

gtg gaa ata aaa

396

Val Glu Ile Lys

130

<210> 8

<211> 132

<212> PRT

<213> Humanized murine anti-human B7-2 light chain

<400> 8

Met Asp Ser Gln Ala Gln Val Leu Ile Leu Leu Leu Leu Trp Val Ser

1

5

10

15

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20

25

30

Val Ser Leu Gly Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln Ser

35

40

45

Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln

50

55

60

Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg

65

70

75

80

Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp

85

90

95

Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr

100

105

110

Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gln Gly Thr Lys

115

120

125

Val Glu Ile Lys

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<212> DNA

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<223> CDR1 of humanized murine anti-human B7-2 heavy chain

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<212> PRT
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<220>
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<210> 11
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<220>
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<221> CDS
<222> (1)..(51)

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Gly

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Gly

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<221> CDS
 <222> (1)..(21)

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<210> 15
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<221> CDS
 <222> (1)..(51)

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gct 51
 Ala

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<212> PRT
<213> Artificial Sequence

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1 5 10 15

Ala

<210> 17
<211> 21
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Trp Ala Ser Thr Arg Glu Ser
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<222> (1)..(24)

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